

Name

AK

Alg2a

December 4, 2019

Intro Case II Mix

$$1) 6x^2 - x - 5$$

$$6x^2 - 6x + 5x - 5$$

$$6x(x-1) + 5(x-1)$$

$$(x-1)(6x+5)$$

$$a \cdot c$$

$$6 \cdot -5 = -30$$

$$F = -30$$

$$S = -1x$$

$$-6x + 5x$$

$$2) 6x^2 - 27x + 12$$

$$3(2x^2 - 9x + 4)$$

$$3(2x^2 - 9x + 4)$$

$$3(x(2x-4) - 1(x-4))$$

$$3(2x-4)(x-1)$$

$$a \cdot c$$

$$2 \cdot 4 = 8$$

$$F = 8$$

$$S = -9x$$

$$-8x - 1x$$

$$3) 6x^2 + 12x - 18$$

$$6(x^2 + 2x - 3)$$

$$6(x+3)(x-1)$$

$$F = -3$$

$$S = +2$$

Don't Forget
your GCF in
your Final Answer!!

$$4) 8x^2 + 13x - 6$$

$$8x^2 + 16x - 3x - 6$$

$$8x(x+2) - 3(x+2)$$

$$(x+2)(8x-3)$$

$$a \cdot c$$

$$8 \cdot -6 = -48$$

$$F = -48$$

$$S = +13x$$

$$+16x - 3x$$

$$5) 8x^2 - 4x - 4$$

$$4(2x^2 - x - 1)$$

$$4(2x^2 - 2x + x - 1)$$

$$4(2x(x-1) + 1(x-1))$$

$$4(x-1)(2x+1)$$

$$a \cdot c$$

$$2 \cdot -1 = -2$$

$$F = -2$$

$$S = -1$$

$$-2x + x$$

$$6) 8x^2 - 96x + 280$$

$$8(x^2 - 12x + 35)$$

$$8(x-7)(x-5)$$

$$F = 35$$

$$S = -12$$

Name _____

December 4, 2019

Alg2a

Intro Case II Mix

7) $15x^2 + x - 6$

$15x^2 + 10x - 4x - 6$

$5x(3x+2) - 3(3x+2)$

$(3x+2)(5x-3)$

$\frac{a \cdot c}{15 \cdot -6 = -90}$
 $F = -90$
 $S = +1x$
 $+10x - 4x$

8) $15x^2 - 30x - 120$

$15(x^2 - 2x - 8)$

$15(x-4)(x+2)$

$\frac{a \cdot c}{15 \cdot -120 = -1800}$
 $F = -1800$
 $S = -2$

9) $15x^2 - 25x + 10$

$5(3x^2 - 5x + 2)$

$5(3x^2 - 3x - 2x + 2)$

$5(3x(x-1) - 2(x-1))$

$5(x-1)(3x-2)$

$\frac{a \cdot c}{3 \cdot 2 = 6}$
 $F = 6$
 $S = -5$
 $-3x - 2x$

10) $16x^2 + 16x + 4$

$4(4x^2 + 4x + 1)$

$4(4x^2 + 2x + 2x + 1)$

$4(2x(2x+1) + 1(2x+1))$

$4(2x+1)(2x+1)$

$\frac{a \cdot c}{4 \cdot 1 = 4}$
 $F = 4$
 $S = 4$
 $+2x + 2x$

11) $16x^2 + 8x - 3$

$16x^2 + 12x - 4x - 3$

$4x(4x+3) - 1(4x+3)$

$(4x+3)(4x-1)$

$\frac{a \cdot c}{16 \cdot -3 = -48}$
 $F = -48$
 $S = +8x$

12) $16x^2 - 48x - 448$

$16(x^2 - 3x - 28)$

$16(x-7)(x+4)$

$\frac{a \cdot c}{1 \cdot -28 = -28}$
 $F = -28$
 $S = -3$